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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/729,959

12/09/2003

Osamu Tachizawa

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01/29/2010

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT

PAPER NUMBER

1611

NOTIFICATION DATE

DELIVERY MODE

01/29/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/729,959	<b>Applicant(s)</b> TACHIZAWA ET AL.	
	<b>Examiner</b> Lakshmi S. Channavajjala	<b>Art Unit</b> 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-16 AND 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Receipt of RCE, amendment and remarks on 11-9-09 is acknowledged.

Claims 1-4, 5-16 and 17-21 are pending.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11-19-09 has been entered.

The following rejections of record have been withdrawn:

1. Claims 1-3, 5-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Flick, Ernest (Cosmetics and Toiletry Formulations, submitted on PTO-1449 dated 8-13-08) as evidenced by Orion Chemique **(should read “as evidenced by the translation of the Brief submitted to European Patent Office by Cognis Gmbh”).**

2. Claims 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick **as evidenced by the translation of the Brief submitted to European Patent Office by Cognis Gmbh** as applied to claims 1-3, 5-16 and 18-20 above, and further in view of US 5,714,446 to Bartz.

3. In light of the amendment, the following new rejections have been made:

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-3, 5-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick, Ernest (Cosmetics and Toiletry Formulations, submitted on PTO-1449 dated 8-13-08), and further in view of US 5,714,446 to Bartz et al, as evidenced by the translation of the Brief submitted to European Patent Office by Cognis Gmbh and US 5,035,832 to Takamura et al.

6. Alternatively, Claims 1-3, 5-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flick, Ernest and US 5,035,832.

7. Flick teaches clear liquid conditioning shampoos and pearlescent shampoos comprising Standapol ES-1, which is sodium laureth sulfate. The translation of a Brief submitted to European Patent Office by Cognis Gmbh describes that ES-1 is made of C12-C14 fatty alcohols with a homolog distribution of ethoxylation of n=0 is 35.43%, n=1 is 21.88, n= 2 is 15.49 and the remaining proportions up to 100% wt are formed by fatty alcohol ether sulfate with 3 or more parts of ethylene oxide. Thus, the percentage distribution of different ethoxylated sulfates fall within the ranges in claims 1 and 6-9. For the amounts of the sulfate, the compositions of Flick describe 30% and 10%, which is within the claimed amounts of claims 1, 10 and 11. For the claim 3 cationic polymers, the clear liquid conditioning shampoo on page 598 of Flick shows 2% polyquart H, a PEG-15 tallow polyamine, which is a cationic conditioning polymer see US 4,314,807 (see col. 22, shampoo formulation) and is within the range of claim16. For claims 2, 12

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and 13, Flick teaches cocoamide DEA and Laureth-9 and for the claimed amphoteric surfactants, Flick teaches betaines such as cocamidopropyl betaine, all of which are also described in the instant specification. For the claimed pearlescent agents (5 and 18), Flick teaches glycol stearate and glycolo distearate in the compositions of page 542 shampoo composition, which also contains the above components i.e., ES-1, nonionic and amphoteric surfactants.

8. Flick does not teach silicones in the composition. Bartz teaches hair conditioning shampoo compositions comprising ethoxylated sulfate surfactants and a nonionic silicone conditioning agent (see claims, abstract and examples). The silicone conditioning agent in the composition of '446 is in the same amount as that claimed in the instant application. '446 suggests 0.1% to 10% of silicone (col. 10, l 1-5), which is within the claimed range. Further, all of the exemplified compositions of Bartz teach a combination of ethoxylated surfactant and 2% of the claimed silicone (polydimethylsiloxane).

9. It would have been obvious for one of an ordinary skill in the art at the time of the instant invention was made to employ the silicone conditioning agent of Bartz in the composition of Flick because Bartz teaches that silicones are essential to improve the hair conditioning (col. 9, L 50-60) and suggests that the combination of the surfactant, silicone conditioner and a cationic conditioning polymer provides excellent cleaning and also hair conditioning benefit. A skilled artisan would have expected not only the conditioning properties with the inclusion of silicone but also enhanced foam because Takamura teaches that polydimethylsiloxane imparts fine foam and a light, tense,

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slippery feeling to the skin and hair (abstract, inventive compositions of the reference in table 1). While Bartz does not recognize foam producing properties of the silicones, instant claims broadly state dimethylpolysiloxane without specifying the structure or the characteristics of the polymer. Whereas, the polymer described by Bartz includes the dimethylpolysiloxane compounds described by Takamura, which are taught for foam production by Takamura. Hence, the ability to produce foam is inherent to the compounds of Bartz.

10. Alternatively, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention was made to employ the silicone compounds such as polydimethylsiloxane or silicone derivatives including amino modified silicones taught by Takamura (col. 2-6 and table 1) in the shampoo compositions of Flick, Ernest because Takamura suggests the silicone compounds to produce fine foam that is non-irritating to the skin and imparts a fine, creamy texture to the skin. Further Takamura teaches that the foam producing silicone compositions surfactants for hair or skin cleansing.

11. While, the references above fail to teach the claimed pH ranges, instant claims recite a pH after dilution of the composition by 20 times. Flick teaches adjusting pH of the composition to 6.5 +/- 0.5 or 5.5-6.5 (pages 598 and 642) and hence the burden is on applicants to show that the pH of the compositions of Flick, which recite the claimed ingredients, do not possess the claimed pH 6 for claim 19, after diluting it 20 times. Even though Flick fails to teach the pH of 3.5 to 4.5, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention was made to optimize

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the pH of the compositions of Flick such that the compositions are suitable for use as hair conditioning shampoos.

### ***Response to Arguments***

12. Applicant's arguments and the declaration filed 10-15-09 have been fully considered but they are not persuasive.

13. It is argued that Flick fails to teach the combination of claimed surfactants and silicones (new claims) and hence does not anticipate instant claims. It is argued that notwithstanding the lack of evidence of the sulfate distribution of Flick, even if the sulfate distribution of Flick were as asserted and even if there were motivation to combine a silicone compound with the sulfated surfactant of Flick, such combination would fail to provide any expectation of an enhancement in foaming speed, lubricity and luster and manageability. It is argued that as an evidence of such enhancements, applicants have conducted additional experiments, submitted in the declaration of Dr. Takeshi Kaharu, a researcher for Kao Corporation, the assignee of the above-identified application. It is argued that Applicants have assessed foaming speed, lubricity and luster and manageability for a composition containing sulfated surfactant and silicone with a composition in which the sulfated surfactant has a sulfate distribution as claimed, in combination with a silicone. According to applicants: "Add. Comparative example 1, having a sulfate distribution within the claims demonstrated somewhat average to below average evaluations of foaming speed, lubricity of foam and luster and manageability. Add. Comparative examples 2 and 3 having a sulfate distribution outside the claims but

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used in combination with a silicone compound as claimed demonstrated somewhat average to below average evaluations of foaming speed, lubricity of foam and luster and manageability.” It is argued that in contrast, Add examples 1 and 2 demonstrated enhanced evaluations of foaming speed, lubricity of foam and luster and manageability. The data suggests that selection of a sulfated surfactant as claimed combined with a silicone provides enhancements in foaming speed, lubricity and luster and manageability as compared to combination of a silicone with a sulfated surfactant outside the scope of the claims.

14. However, the arguments and the evidence provided in the 1.132 declaration are not persuasive because, the above results clearly show that the enhanced foaming speed and lubricity, though not claimed, are imparted only by the presence of silicone compounds. The issue is whether the properties differ to such an extent that the difference is really unexpected. In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicants must further show that the results were greater than those which would have been expected from the prior art to an unobvious extent, and that the results are of a significant, practical advantage. Ex parte The NutraSweet Co., 19 USPQ2d 1586. Indeed it is examiner’s position that the results are expected from the cited prior art. Takamura also teaches that the silicone compounds described in their patent improve the foam and skin feeling over and above the foam produced by the surfactants alone. Thus, the addition of silicone compounds whether as conditioning agents (Bartz) or foam producers (Takamura) would necessarily provide an improved or enhanced foam over and above that produced by the surfactants alone. In other words,



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the argued result is not unexpected and is well known in the prior art at the time of the instant invention. Furthermore, both Bartz and also Takamura teach silicone compounds in amounts that are within the claimed (new claim 21). The present combination of references includes US patent to Takamura, which clearly identifies the foam properties of the claimed silicone compounds.

15. With respect to the argument regarding the finality of action dated 5-15-09, examiner clarified in the final rejection that Orion Chemique reference was not relied upon for rejecting the claims, which is evident from the discussion of the actual rejection. The citation of the Orion Chemique reference in the statute occurred in error. Further, the rejection clearly identified that "The translation of a Brief submitted to European Patent Office by Cognis GmbH describes that ES-1 is made of C12-C14 fatty alcohols with a homolog distribution of ethoxylation of  $n=0$  is 35.43%,  $n=1$  is 21.88,  $n=2$  is 15.49 and the remaining proportions up to 100% wt are formed by fatty alcohol ether sulfate with 3 or more parts of ethylene oxide", which in itself indicates that examiner relied on the translation and not the Orion Chemique reference.

16. Furthermore, any confusion caused in the final rejection is now removed because the rejection in this action no longer cites Orion Chemique reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -5.30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila G. Landau can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lakshmi S Channavajjala/  
Primary Examiner, Art Unit 1611  
January 16, 2010